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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

CHEVALIER, ALICIA ANN

ART UNIT	PAPER NUMBER
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1772

DATE MAILED: 09/19/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/722,329

Applicant(s)

DOOMERNIK, MARINUS A.

Examiner

Alicia Chevalier

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 July 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 and 24-28 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-16 and 24-28 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

RESPONSE TO AMENDMENT

1. Claims 1-16 and 24-28 are pending in the application, claims 17-23 have been cancelled.

REJECTIONS

2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claim Rejections - 35 USC § 103

3. Claims 1-4, 8-16 and 24-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Will et al. (U.S. Patent No. 5,766,795) in view of Weiss et al. (U.S. Patent No. 5,830,596).

Regarding Applicant's claim 1, Will discloses a multi-layer label for a battery comprising a transparent shrinkable outer film (*transparent foil, col. 3, line 24 and col. 1, lined 36-37*) forming the outermost layer of the label (*figure 5*), a first adhesive layer (*laminated adhesive, col. 3, line 25*), a transparent shrinkable carrier film (*transparent foil, col. 3, lines 20-21 and col. 1, lined 36-37*), an outwardly visible indicia (*imprint, col. 3, line 24*) and a second adhesive (*laminated adhesive, col. 3, line 23*). The transparent shrinkable carrier film having the first adhesive layer on one side confronting the outer layer and bonding the carrier layer to the outer layer (*figure 5*).

Will fails to disclose that the adhesives are transparent and that the outwardly visible indicia layer is on the carrier layer on the opposite side from the outermost layer.

Weiss discloses a multi-layer label for a battery (*title and figure 2*) comprising a transparent shrinkable film and clear, i.e. transparent, adhesive (*col. 6, lines 13-17*).

Will and Weiss are analogous because both disclose multi-layer labels for batteries.

It would have been obvious to one of ordinary skill in the art at the time of the invention to use Weiss' transparent adhesives as the adhesive layers in Will in order to improve visibility through the layers to see the indicia. One of ordinary skill in the art would have been motivated to transparent adhesives because they would allow an unobscured view of the printed layer.

Will discloses the claimed invention except for that the outwardly visible indicia layer is on the carrier layer on the opposite side from the outermost layer. However, Will discloses in the various embodiments (*figures 1, and 3-5*) that the indicia, i.e. imprint layer, can be behind transparent shrinkable film (*figure 4*), in front of a transparent shrinkable film (*figure 5*) or on a paper carrier layer adjacent the battery (*figure 3*). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made put the outwardly visible indicia layer is on the carrier layer on the opposite side from the outermost layer, since it has been held that rearranging parts of an invention involves only routine skill in the art. MPEP 2144.04 VI C.

Regarding Applicant's claim 2, Will discloses that at least one of the outer film and the carrier film are made of polyvinyl chloride (*col. 1, lines 42-44*).

Regarding Applicant's claims 3 and 4, Will fails to disclose that at least one of the outer film and the carrier film are made of polypropylene or polyester. Weiss discloses that the shrinkable film is made of polyvinyl chloride, polypropylene or polyester (*col. 6, lines 30-36*). Therefore, since Weiss shows that polyvinyl chloride, polypropylene and polyester are

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equivalent in the art for use as shrinkable films in battery labels at the time the invention was made, one of ordinary skill in the art would have found it obvious to substitute polypropylene or polyester for polyvinyl chloride.

Regarding Applicant's claim 8, Will discloses that the indicia layer includes a non-metallic pigment that produces the effect of a metallized label (*col. 3, lines 7-9*).

Regarding Applicant's claim 9, the limitation "wherein the outer film and the carrier film are coextruded to form a film composite" is a method limitation and does not determine the patentability of the product, unless the process produces unexpected results. The method of forming the product is not germane to the issue of patentability of the product itself, unless Applicant presents evidence from which the Examiner could reasonably conclude that the claimed product differs in kind from those of the prior art. MPEP 2113. Furthermore, there does not appear to be a difference between the prior art structure and the structure resulting from the claimed method because Will discloses a film composite comprising two distinct film layers (*figure 5*).

Regarding Applicant's claims 10 and 11, Will fails to disclose that the label comprises a thermochromic material and a conductive layer.

As disclosed above Weiss discloses a label for a battery. The label further comprises an inserted battery tester device that comprises a layer of thermochromic material and a conductive layer in thermal contact with the thermochromic layer (*col. 3, line 43 through col. 4, line 21*).

It would have been obvious to one of ordinary skill in the art at the time of the invention to insert Weiss' battery tester device with a thermochromic material and conductive layer in Will's label in order to be able to test the battery to see if it has sufficient charge to operate a

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desired device. One of ordinary skill in the art would have been motivated to insert a battery tester into the label so that separate stand alone testers, which are easily misplaced and cumbersome, are not need (*Weiss col. 1, lines 42-54*).

Regarding Applicant's claim 12, Weiss further shows that the conductive layer does not extend the entire width of the battery (*Weiss figure 1*). Therefore the length dimension of at least one of the outer film and the carrier film exceeds the circumference of the battery by an amount at least equal to the width of the conductive layer, since Will shows that the outer and carrier films extend the entire length of the battery (*Will figure 1*).

Regarding Applicant's claim 13, the combination of Will and Weiss discloses that the conductive layer, when the label is wrapped around a battery, is confronted on both sides by at least one of the outer film and the carrier film.

Regarding Applicant's claims 14 and 15, Will fails to discloses that the outer film has a thickness in the range of about 10 to 25 microns or that the carrier film has a thickness in the range of about 25 to 50 microns.

Weiss discloses that the thickness of the shrinkable film is not particularly limited, but is preferably in the range of from about 0.0005 to about 0.005 inches (*col. 6, lines 40-43*), which is equivalent to about 12.7-127 microns.

Therefore, the exact thickness of the carrier and outer films are deemed to be a result effective variable. It would require routine experimentation to determine the optimum value of a result effective variable, such as thickness of the carrier and outer films, in the absence of a showing of criticality in the claimed thickness. *In re Boesch*, 205 USPQ 215 (CCPA 1980), *In re Woodruff*, 16 USPQ2d 1934, 1936 (Fed. Cir. 1990).

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Regarding Applicant's claim 16, Will discloses that the label further includes a release liner confronting the second adhesive (*base, col. 2, lines 35-36*).

Regarding Applicant's claim 24, the combination of Will and Weiss discloses all the limitation as described above with regards to claims 1, 10, 11 and 16.

Regarding Applicant's claim 25, the combination of Will and Weiss discloses the claimed invention except for that the layer of thermochromic material and the layer of conductive material are on opposite sides of the second adhesive layer. It would have been obvious to one having ordinary skill in the art at the time the invention was made put the outwardly visible indicia layer is on the carrier layer on the opposite side from the outermost layer, since it has been held that rearranging parts of an invention involves only routine skill in the art. MPEP 2144.04 VI C.

Regarding Applicant's claim 24, the combination of Will and Weiss discloses all the limitation as described above with regards to claim 13.

4. Claim 5-7, 27 and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Will and Weiss as applied above, and further in view of Abe et al. (U.S. Patent No. 5,725,966).

Will and Weiss are relied upon as described above.

Will and Weiss fail to disclose that the outer film has balanced oriented shrinkable properties and the carrier film has mono-axially oriented shrinkage properties.

Abe disclose a multiplayer label for batteries (*col. 3, line 39*) comprising a heat-shrinking resin film made of polyvinyl chloride, polypropylene or polyester (*col. 3, lines 54-57*). Abe further discloses that the film can either be uniaxially, i.e. mono-axially, or biaxially, i.e.

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balanced, oriented so that it can shrink largely in the circumferential direction of the battery when the film is wrapped around it (*col. 3, lines 62-65*).

Will, Weiss and Abe are analogous because they disclose multi-layer labels for batteries.

It would have been obvious to one of ordinary skill in the art at the time of the invention to either balance or mono-axially orient the outer or carrier films in the combination of Will and Weiss as taught by Abe in order to form fit the label to the battery. One of ordinary skill in the art would have been motivated to use balanced or mono-axially orientations because they allow shrinkage largely in the circumferential direction of the battery when the film is wrapped around it (*Abe col. 3, lines 62-65*).

ANSWERS TO APPLICANT'S ARGUMENTS

5. Applicant's arguments in the response filed July 6, 2005 regarding the 35 U.S.C. 103 rejections of record have been carefully considered but are deemed unpersuasive.

Applicant argues that none of the references of record have been found to disclose or fairly suggest the claimed structure recited by independent claims 1 and 24. Applicant specifically argues that Will discloses extra intermediary layers between the outermost layer and the carrier layer and instant claim 1 claims that the carrier film has a first transparent adhesive layer on one side of the confronting the outer layer and bonding the carrier layer to the outer layer and an outwardly visible indicia layer on the other side and a second transparent adhesive layer adjacent the indicia for bonding the label to the battery.

The fact that Will discloses extra intermediary layers between the outermost layer and the carrier not required by Applicant's claimed invention is irrelevant. Furthermore, it is noted that

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the first adhesive in Will is between the carrier film and outer film and confronting, i.e. facing, the outer film as claimed.

It appears that Applicant is arguing that the outer film is disposed on the first adhesive and the carrier film is also disposed on the first adhesive on a side opposite the outer film. However, the instant claim 1 does not require the layers to be disposed upon one another, just that they are in a certain order in the label.

Conclusion

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alicia Chevalier whose telephone number is (571) 272-1490. The examiner can normally be reached on Monday through Friday from 8:00 am to 4:00 pm.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Harold Pyon, can be reached on (571) 272-1498. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, reading "Alicia Chevalier". The signature is fluid and cursive, with the first name "Alicia" and last name "Chevalier" clearly distinguishable.

Alicia Chevalier
Primary Examiner
9/14/05